



SOIL AND WATER *Resources*

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Support for Success - Missouri's Parks, Soils and Water Sales Tax

By Tom Bastian - Originally published in the *Missouri Resources* Summer 2016 issue

Leaves rustling in a gentle breeze, water cascading down a rocky hill; a near-forgotten flower soaking in the scattered sun breaking through the tree canopy; the subtle sound of a carefree ornate box turtle rummaging through the forest floor in search of a meal – all are common sights and sounds on the winding trails found in your Missouri state parks and historic sites.

The parks, located throughout the diverse regions of our state, have served as a temporary escape and an opportunity for reconnection with the beauty of nature for many Missourians and visitors from other states. Historically, Missourians have sought to preserve portions of the land so generation after generation will have the opportunity to enjoy the rich beauty of the state we call home.

In order to preserve our parks, many citizen-support organizations and individuals worked together with the Missouri General Assembly to create a one-tenth-of-one-percent sales tax through a constitutional amendment. Missouri voters approved what is now called the Parks, Soils and Water Sales Tax in 1984. Voters continued their support by reapproving the tax in 1988, 1996 and 2006. Due to continuous citizen support, the 2006 renewal received its highest public approval with a two-thirds majority.

The Missouri Department of Natural Resources divides the revenue generated from the sales tax equally between Missouri's state park system and the Soil and Water Conservation Program. "The sales tax provides critical funding for core functions that the department has responsibility for," said Sara Parker Pauley, director of the Department of Natural Resources.

"That includes protecting our soil resources, improving water quality and managing an award-winning state park system for our guests." The consistent funding has allowed Missouri State Parks to maintain and upgrade the state park system in a variety of ways to better serve the needs of visitors while still protecting valuable natural, cultural and historic resources. Much of the basic maintenance includes repairing and renovating buildings, restrooms, shelter houses and cabins while also stabilizing and protecting historic structures throughout the system.

In addition, the 88 locations within the state parks system include 49 regulated public water systems, 96 wastewater systems, 260 miles of paved roadway, and more than 1,000 miles of trail. The parks and historic sites also have more than 130 shelters and 3,600 campsites available for public use.



MISSOURI
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NATURAL RESOURCES

“The Parks, Soils and Water Sales Tax provides a consistent funding mechanism that allows us to operate and improve our system of state parks and historic sites from year to year,” said Bill Bryan, director of Missouri State Parks. “We’re proud to say that Missouri state parks and historic sites continually earn a high visitor approval rating, and are consistently ranked as one of the top four state park systems in the nation.”

Some of the recent projects funded by sales tax revenue include cabin renovations at Montauk State Park; roof repair at Mark Twain Birthplace State Historic Site; restoration of the historic Civilian Conservation Corps (CCC) Alta Shelter at Dr. Edmund A. Babler Memorial State Park; and many more.

Another benefit of the tax is that Missouri state parks and historic sites do not charge an entrance or dayuse fee to the public. This ensures that everyone has the opportunity to enjoy the natural splendor of our state. On average, more than 18 million people visit the state park system each year.

Missouri state parks and historic sites also contribute to a healthy economy. An economic impact study released in 2012 estimated that annual expenditures of state park visitors total approximately \$778 million. After this money enters the local economy, the overall impact of these expenditures is estimated at \$1.02 billion in sales, \$307 million in payroll and related income, and \$123 million in federal, state and local taxes. Park visitors’ expenditures support 14,535 jobs throughout the state.

“As guests travel to and from state parks to enjoy outdoor recreation and explore history, communities around the

state benefit from busy hotels, motels, restaurants and retail stores,” said Bryan.

Missouri State Parks is committed to providing a high level of visitor services. In order to do so, there must be enough staff to provide clean and safe facilities, enough interpreters to present the significance of each of the parks and historic sites, enough law enforcement personnel to ensure visitor safety, and enough general staff to provide adequate service to the public.

While the benefits of the park system are more visible to the general public, Missouri’s Soil and Water Conservation Program has a large impact on agriculture, landowners, consumers and Missouri’s growing economy.

Abundant water resources and clean drinking water benefit all Missourians, regardless of what they do, where they live or how they spend their recreational time.

After the Dust Bowl of the 1930s, Americans realized how devastating soil erosion could be as an estimated 300 million tons of soil had been lost. Missouri had the highest rate of erosion in the nation, which led to the creation of the Missouri Soil and Water Districts Commission in 1943.

Soil erosion adversely affects local and national food supplies and economies. Erosion, often caused by stormwater runoff, carries soil and fertilizers away from fields and into the waterways, which impacts downstream water quality. The eroded soil can destroy valuable aquatic habitat such as fish spawning areas and can cause contaminants to enter drinking water supply systems. This creates higher treatment costs for local water systems and raises utility bills for Missourians and others downstream.



Reduce erosion and water pollution by establishing strips of permanent vegetative cover between crops, around hill slopes, and alternated downhill slopes.

In 1982, Missouri continued to lose soil at an annual rate of 10.8 tons per acre through erosion on cultivated cropland. The department's Soil and Water Conservation Program and the 114 Soil and Water Conservation Districts help landowners and farmers control and minimize erosion across our diverse state. However, a consistent funding source did not exist.

"All life depends on healthy, productive soil and clean, abundant water," Pauley said. "We depend on high-quality water for drinking and healthy land for agricultural and industrial purposes that drive our state's economy while putting food on the table for our families."

Since the passage of the Parks, Soils and Water Sales Tax, the impact of the soil and water conservation districts has been substantial. The districts have provided more than \$660 million to Missouri agricultural and private landowners to implement more than 220,000 soil and water conservation practices over the past 32 years.

"The Soil and Water Conservation Program, through local, state and federal partnerships, promotes farming techniques and conservation practices that have kept more than 177 million tons of soil on our fields and out of our waters while preserving the productivity of Missouri's farms," said Colleen Meredith, director of the Missouri Soil and Water Conservation Program.

Of Missouri's 44.6 million acres of land, 14.8 million are considered cropland, with almost half of that classified as highly erodible. The consistent funding stream allows the soil and water conservation districts to offer cost-share programs to farmers and landowners to implement effective conservation practices. The cost-share programs provide partial reimbursement of the cost – up to 75 percent – for the installation of conservation practices that prevent or control excessive erosion and improve water quality.

Some of these practices include buffers, grazing systems, cover crops and sediment basins. The funding also provides for research and water quality monitoring. These efforts identify new methods for soil and water conservation practices that produce the best results for preventing erosion and protecting Missouri's water quality.

"It says a lot about Missouri's citizenry when they know how important our natural resources and our state park system are that they would vote and vote again to approve the Parks, Soils and Water Sales Tax designed to improve those resources throughout the state," said Pauley.

For more information about the Parks, Soils and Water Sales Tax, visit dnr.mo.gov/parks-soil-water.htm.

The *Missouri Resources* Summer 2016 issue is available online at dnr.mo.gov/magazine/docs/mr-summer-2016.pdf.

Missouri Soil and Water Districts Commission to meet Aug. 17 at the Missouri State Fair in Sedalia

The Missouri Soil and Water Districts Commission will hold its next meeting at 9 a.m. on Wednesday, Aug. 17 at the Missouri State Fair in Sedalia. The meeting will be held in Room 129 in the Lowell Mohler Assembly Hall inside the National Guard Armory.

Those wishing to address the commission should contact the department's Soil and Water Conservation program prior to the meeting. A comment card to address the commission can also be submitted the day of the meeting.

For more information or a complete meeting agenda contact the Missouri Department of Natural Resources' Soil and Water Conservation Program at 800-361-4827 or 573-751-4932 or visit dnr.mo.gov/env/swcp/meetings.htm.

People requiring special services or accommodations to attend the meeting can make arrangements by calling 800-361-4827 or 573-751-4932. Hearing-impaired individuals may contact the program through Relay Missouri at 800-735-2966.

AgNPS SALT Program Wraps Up

The Agricultural Nonpoint Source Special Area Land Treatment (AgNPS SALT) program was established as a pilot program in 1986. The local soil and water conservation districts used the SALT program to work with landowners to reduce soil erosion and protect water quality by targeting assistance in a priority watershed.

A priority watershed is one where the district identified a specific problem that needed to be addressed on a watershed basis. Identified problems might include soil erosion, contaminated drinking water, stream degradation, or contaminated lakes or streams.

The program allowed county soil and water conservation districts to direct technical and financial assistance to landowners with land identified and prioritized as having water quality impairments caused by agricultural nonpoint source pollution. All SALT projects were completed in 2016.

The goal of the SALT program was to treat a minimum of 80 percent of the land within a five to seven year period. Land was treated with a variety of conservation practices, depending on what would work best to solve the nonpoint source pollution challenges in the watershed. Since 1986, over 100 locally led SALT watershed projects were completed throughout Missouri.

Nonpoint source pollution is caused by rainfall or snowmelt moving over and through the ground. As the runoff moves, it picks up and carries away natural and human-made pollutants, finally depositing them into lakes, rivers, wetlands, coastal waters and ground waters.

Examples of agricultural nonpoint source pollutants and solutions include:

Sedimentation

Sedimentation occurs when wind or water runoff carries soil particles from an area, such as a farm field, and transports them to a water body, such as a stream or lake. Excessive sedimentation clouds the water, which reduces the amount of sunlight reaching aquatic plants; covers fish spawning areas and food supplies; and clogs the gills of fish. In addition, other pollutants like phosphorus, pathogens, and heavy metals are often attached to the soil particles and wind up in the water bodies with the sediment. Farmers and ranchers can reduce erosion and sedimentation by applying management measures to control the volume and flow rate of runoff water to keep the soil in place and reduce soil transport.

Pesticides

Pesticides, herbicides, and fungicides are used to kill pests and control the growth of weeds and fungi. These chemicals can enter and contaminate water through direct application, runoff and wind transport. They can kill fish and wildlife, poison food sources, and destroy animal habitat. Integrated Pest Management (IPM) techniques based on the specific soils, climate, pest history, and crop for a particular field can limit pesticide use and manage necessary applications to minimize pesticide movement from the field.

Inefficient Irrigation Systems

Irrigation water management is used to match the need of the crop to the amount of water applied.

Overgrazing

Overgrazing exposes soils, increases erosion, encourages invasion by undesirable plants and can destroy fish habitat, stream banks, and floodplains. To reduce the impacts of grazing on water quality, farmers and ranchers can adjust grazing intensity, keep livestock out of sensitive areas, provide alternative sources of water and shade, and revegetate pastureland for more plant diversity and health.

Nutrients

Nutrients such as phosphorus, nitrogen and potassium in the form of fertilizers and manure, are applied to enhance production. When these nutrients are applied in excess of plant needs, they can wash into aquatic ecosystems. They can cause excessive plant growth, which can reduce water

clarity, create a foul taste and odor in drinking water, and impact fish and other aquatic species. Nutrient management plans can help maintain optimum crop yields and save money on the use of fertilizers while reducing nonpoint source pollution.

Improper Animal Waste Management

By confining animals to areas or lots, farmers and ranchers can efficiently feed and maintain livestock. But these confined areas can become major sources of animal waste. Runoff from poorly managed facilities can carry pathogens (bacteria and viruses), and excess nutrients and create major water quality problems. Ground water can also be contaminated by seepage. Discharges can be limited by storing and managing facility wastewater and runoff with an appropriate waste management system.

Partners

Partners greatly contributed to the success of SALT projects and were an essential element in success of these projects. Participation could have been in the form of financial contributions, technical assistance, publicity, sponsorship or other types of support.

For more information about the history of the SALT program, visit dnr.mo.gov/env/swcp/salt_overview.htm.

What's Next

The department is now focused on watersheds through the Our Missouri Waters initiative. Our Missouri Waters includes 66 watersheds across the state. The department has established a list of priority watersheds that will be brought into focus each year until all 66 watersheds have been evaluated within a five-year cycle.

The Our Missouri Waters effort presents the opportunity for local citizens and local leaders to hear and be heard on water resource issues; to be recognized as important and critical voices in the process; and influence the ultimate decision-making process on setting planning priorities and goals for their watershed. Our Missouri Waters informs and



Beef animal waste management structure.

empowers local citizens, businesses and communities about the importance of our waters - both quality and quantity.

The process for these watersheds includes forming a local Watershed Advisory Committee that will meet and discuss watershed priorities over a series of meetings. The culmination of the meetings will be a Healthy Watershed Plan, which documents the discussions of the Committee, the priorities the members have for the watershed, and what next steps members feel are necessary in addressing the priorities. The department will work to establish a Watershed Advisory Committee in the 66 HUC-8 watersheds across the state by the end of first five year cycle.

Continued public participation and building strong partnerships will be the key to our success. Our soil and water conservations partners are a valuable resource in sharing understanding and leading action that helps protect our watersheds. Together, we will complete demonstration projects that will highlight how the collaboration between the department and external partners can improve outcomes for local communities. Our Missouri Waters is not just a planning exercise; it's something much bigger with the promise of greater success.



The department has also completed a *State of Our Missouri Waters Summary* for the current focus watersheds. The summaries provide information about the activities happening on the land and water and how they can influence water quality and quantity. See the summaries and find out more about the Our Missouri Water initiative online at dnr.mo.gov/omw.

Visit the Missouri Department of Natural Resources at the Missouri State Fair Aug. 11 through 21 in Sedalia

The Missouri Department of Natural Resources will present displays and activities at the 2016 Missouri State Fair at the Womans Building located across from the Centennial Gate Aug. 11 through 21 in Sedalia.

On Monday, Aug. 19, see the Jackson County Soil and Water Conservation District's Worm Tunnel on the front lawn from 9 a.m. to 4 p.m. Walk through the worm tunnel as if you were underground and see what lives beneath the soil and how it contributes to soil health.

Visitors can learn about Missouri's newest state park, Echo Bluff State Park. Echo Bluff State Park offers camping and kayaking in Missouri's state parks. Explore the world of pollinators from bees to butterflies and learn what Missouri State Parks is doing to bring the monarch butterfly back and

how you can help. See recycled-content items and find out how you can recycle phones and old TVs, participate in a firing drill of a one-third size civil war replica cannon, hear about Missouri's diverse population of bats, and much more.

For a list of the daily department activities at the Missouri State Fair, visit dnr.mo.gov/statefair.

NRCS Conservation Client Gateway Website



The Natural Resources Conservation Service (NRCS) has a tool to assist Missouri landowners with conservation planning and overall management of their conservation program participation. The Conservation Client Gateway (CCG) is a U.S. Department of Agriculture (USDA) public website that allows individual landowners and land users the ability to securely request conservation technical and financial assistance from USDA NRCS. An individual does not have to be a USDA program participant to enroll.

CCG provides users with easy access to NRCS through the internet as a supplement to in-person support. The program combines information available from NRCS and the Farm Service Agency to allow participants to request planning assistance, submit digitally signed documents, certify practice completion, and manage program payments. NRCS State Conservationist J.R. Flores is contacting partners across Missouri to let them know the importance of CCG to NRCS and to ask for assistance to suggest CCG to landowners.

Beginning with fiscal year 2016, Missouri has established a goal of achieving 50 registered CCG participants per NRCS administrative area. Due to the need for information security and to protect the client's identity, the program pulls information from publicly available sources to verify the client's identity, based on questions that should only be known by the individual client or participant.

Missouri NRCS has finalized a strategic plan for CCG in the state and have initiated a friendly competition among field offices to recognize those individuals and offices enrolling the most clients in CCG. The web link for CCG is nrcs.usda.gov/wps/portal/nrcs/main/national/cgate.

Contact your local USDA office for more information at nrcs.usda.gov/wps/portal/nrcs/main/mo/contact.



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